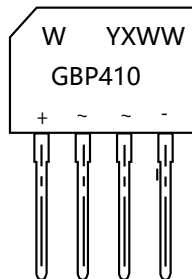


Glass Passivated Bridge Rectifiers



PINNING

| PIN | DESCRIPTION |
|-----|--------------------|
| 1 | Input Pin (~) |
| 2 | Input Pin (~) |
| 3 | Output Anode (+) |
| 4 | Output Cathode (-) |

Features

- Compliant with RoHS Provisions
- Low forward voltage, high forward current
- High forward surge current capability
- High heat-conducting performance
- Thermal welding performance:
260 °C/10sec

Applications

- Switching Power Supply
- Home Appliances, Office Devices
- Industrial Auto-equipments

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

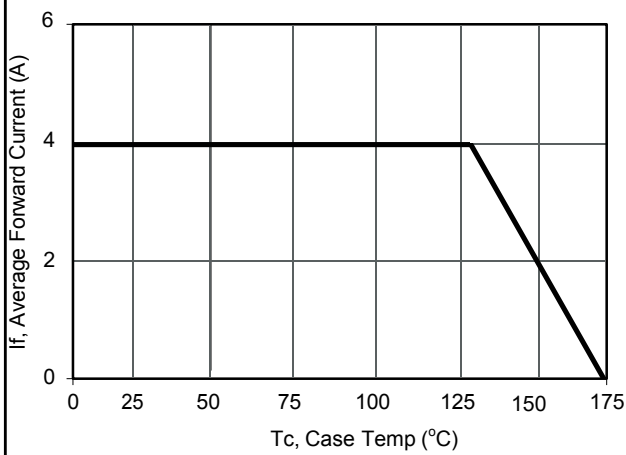
| Parameter | Symbols | GBP410 | Units |
|---|----------------|------------|------------------|
| Maximum Repetitive Peak Reverse Voltage | VRRM | 1000 | V |
| Maximum RMS voltage | VRMS | 700 | V |
| Maximum DC Blocking Voltage | VDC | 1000 | V |
| Average Rectified Output Current | I_o | 4.0 | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | IFSM | 120 | A |
| $I^2 t$ rating for fusing (1ms < t < 8.3ms) | $I^2 t$ | 60 | A ² S |
| Maximum Forward Voltage at 2.0 A | VF | 1.1 | V |
| Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C | IR | 5 500 | μA |
| Typical Junction Capacitance (Note1) | Cj | 35 | pF |
| Operating and Storage Temperature Range | Tj, Tstg | -55 ~ +175 | °C |
| Typical thermal resistance (Note 2) | RthJA RthJL | 30 11 | °C/W |

Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

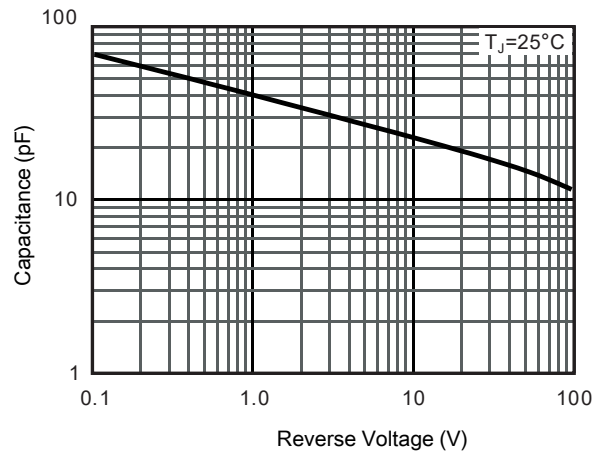
2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.

Unit mounted on glass-epoxy substrate with 1oz/ft² 20x20 mm copper pad per pin with heatsink

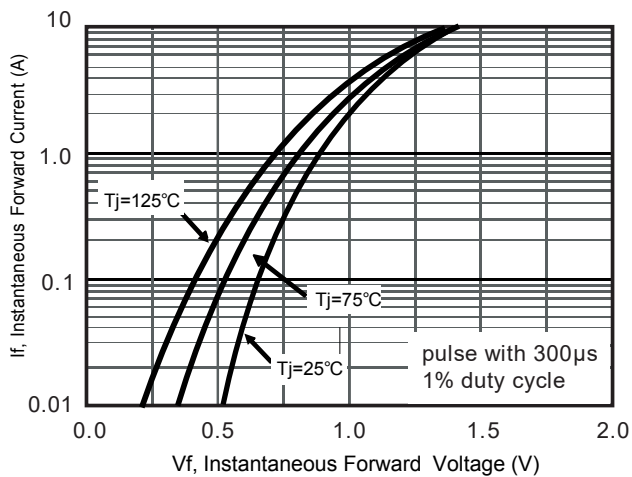
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



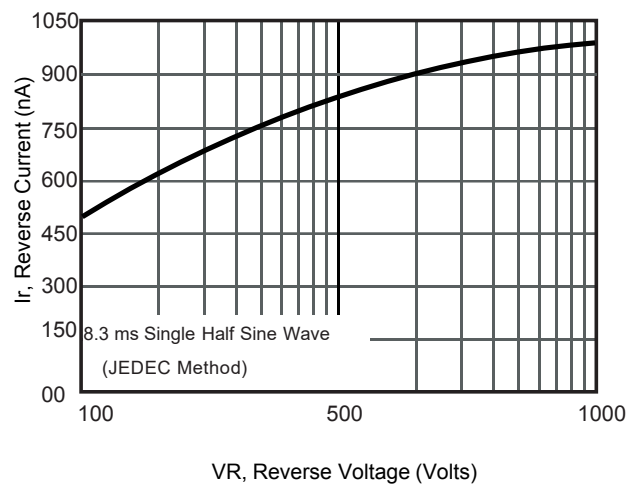
Current Derating, Case



Typical Junction Capacitance

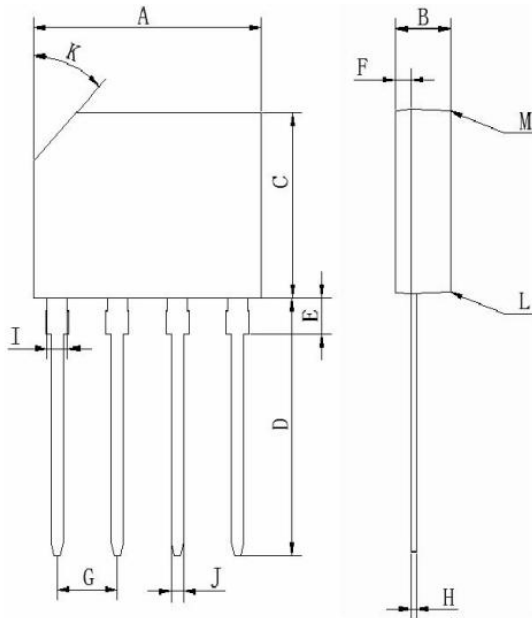


Typical Forward Voltage



Typical Reverse Current

PACKAGE OUTLINE DIMENSIONS



| <i>GBP Unit:mm</i> | | |
|-------------------------------------|---------------|------------|
| <i>DIM</i> | <i>MIN</i> | <i>MAX</i> |
| <i>A</i> | 14.25 | 14.75 |
| <i>B</i> | 3.35 | 3.65 |
| <i>C</i> | 10.2 | 10.6 |
| <i>D</i> | 14.3 | 14.8 |
| <i>E</i> | 1.8 | 2.2 |
| <i>F</i> | 0.8 | 1.1 |
| <i>G</i> | 3.56 | 4.06 |
| <i>H</i> | 0.3 | 0.55 |
| <i>I</i> | 1.22 | 1.42 |
| <i>J</i> | 0.76 | 0.86 |
| <i>K</i> | 2.7X45°(Typ.) | |
| <i>L</i> | - | 3° |
| <i>M</i> | - | 3° |
| <i>All Dimensions in millimeter</i> | | |